**REMARKS**

Minor amendments have been made to claims 1, 2, 5, 6, 9 and 10. Claims 3, 7 and 11 have also been amended and support for the amendment to claims 3, 7 and 11 can be found at FIG. 3 and pages 3-4 of the specification.

Claims 1-12 are pending and under consideration. Reconsideration is respectfully requested.

**I. REJECTION OF CLAIMS 1-3, 5-7 AND 9-11 UNDER 35 U.S.C. § 103(a) AS BEING UNPATENTABLE OVER PALAY ET AL. (US PATENT NO. 5,613,120;HEREINAFTER "PALAY") IN VIEW OF MARTIN (US PATENT NO. 6,438,746):**

At page 4 of the Office Action, the Examiner admits that Palay fails to disclose the execution statement is to be executed in parallel or parallelized by a parallelization directive, and wherein the objects are generated and destructed in addition to original objects to the class". However, the Examiner asserts that Martin makes up for the deficiencies of Palay. However, the Applicants respectfully disagree.

Instead, Martin discloses a compiler for a distributed processing on a plurality of host computers which is arranged to receive a source program written in a computing language, comprising first statements which are compilable by other compilers, the compiler or pre-compiler being arranged to operate on second statements which will be ignored by said other compilers to adapt the program for multiprocessor operation (see column 2, lines 14-24).

Also, Martin discloses when the code is processed by the pre-compiler, functional criteria have effects both in generating new compilable C++ code and in generating directives to the compiler (see column 8, 59-63). Further, Martin discloses that the pre-compiler selects the number of copies of an object to exist in parallel to give the required degree of availability, and extends the constructor code for that class (which instantiates new objects of the class) to cause the required number of copies simultaneously to be created (on different hosts) in runtime (see column 9, lines 48-54).

However, the Applicants respectfully submit that neither Martin nor Palay, individually or combined, teach or suggest "...when a class-type variable is contained in said execution statement to be executed in parallel or in said parallelization directive, generating an instruction to call a destruction instruction routine for the generated object of the class, after said execution statement to be executed in parallel or said execution statement to be parallelized by said parallelization directive, in order to destruct the generated object in addition to said original

object of the class, as recited in claim 1.

Further, at page 3 of the Office Action, the Examiner states that the constructor as shown in column 27, line 65 to column 28, line 11 of <u>Palay</u> is comparable to "an instruction to call a construction instruction routine" as recited in the present invention. However, the Applicants respectfully disagree.

The Applicants respectfully submit that "constructor" means in object-oriented programming, "a special method used to initialize an object" (Emphasis added). That is, the constructor is called when initializing an object, but the constructor does not call the constructor itself. "An instruction to call a construction instruction routine for an object of the class" as defined in claim 1, the construction instruction routine is called by the instruction when executed. That is, "the instruction" as claimed in claim 1 is not similar to "a constructor" as shown in <u>Palay</u>.

Further, at page 3 of the Office Action, the Examiner mentions that "when a class is defined" as in <u>Palay</u> is comparable to "when a class-type variable is contained in an execution statement" as in the present invention. However, the Applicants respectfully disagree.

The Applicants respectfully submit that the instruction mentioned in claim 1 is generated when a class-type variable in a class is contained in an execution statement to be executed in parallel or in parallelization directive. Thus, <u>Palay</u> also fails to teach or suggest this feature.

Further, <u>Martin</u> does not disclose all of the deficiencies of <u>Palay</u> mentioned above. Instead, Martin discloses at column 7, lines 34-39 the comment statement is ignored by the C++ compiler. That is, the parallelization statements as asserted by the Examiner, are not the execution statement to be executed in parallel, which is written by a programmer, and is processed by the compiler. Further, in <u>Martin</u>, there is no description or suggestion, that the "comment statement" contains "the class-type variable" as shown in the present invention.

Further, at page 4 of the Office Action, the Examiner asserts that <u>Martin</u> discloses "directives" at column 8, lines 59-63. However, the Applicants respectfully submit that the directives of <u>Martin</u> are generated by a pre-compiler as previously mentioned above. In the present invention, the "parallelization directive is originally included in the source program written by a programmer. Further, in <u>Martin</u>, there is no description or suggestion that the directives contain "the class-type variable" as in the present invention.

Further, the Examiner asserts that <u>Martin</u> discloses "when an object of a class is to be executed in parallel, the system generates constructor code to instantiate a number of objects in addition to the original" in column 9, lines 48-54. However, the Applicants respectfully submit

that in <u>Martin</u>, the pre-compiler extends the constructor code for that class.   However, this means that only the constructor itself is extended in a certain manner.  Again, the instruction in as recited in claim 1 of the present invention does not correspond to the extension of the constructor code itself.

Regarding claim 2, at page 5 of the Office Action, the Examiner asserts that the "generation of an object file" in <u>Palay</u> is comparable to "generating an intermediate language from said source program" as in the present invention.  The Applicants respectfully disagree.

The Applicants respectfully submit that the "object file" of <u>Palay</u> does not correspond to "an intermediate language" of the present invention.  FIG. 1 of <u>Palay</u> indicates that a compiler outputs an object file.  Therefore, the object file is not in the intermediate representation.

Although the above comments are specifically directed to claims 1 and 2, it is respectfully submitted that the comments would be helpful in understanding differences of various other rejected claims over the cited reference.  Therefore, it is respectfully submitted that the rejection is overcome.

## II.     REJECTION OF CLAIMS 4, 8 AND 12 UNDER 35 U.S.C. § 103(a) AS BEING UNPATENTABLE OVER PALAY IN VIEW OF MARTIN AND FURTEHR IN VIEW OF UMEKITA ET AL. (US PATENT NO. 5,452,461;HEREINAFTER "<u>UMEKITA</u>"):

At page 7 of the Office Action, the Examiner admits that neither <u>Palay</u> nor <u>Martin</u> disclose "a compiler for a parallel computer with shared memory".  However, the Examiner asserts that <u>Umekita</u> makes up for the deficiencies of <u>Palay</u> and <u>Martin</u>.  The Applicants respectfully disagree.

As previously mentioned above, <u>Martin</u> fails to make up for the deficiencies of <u>Palay</u>.  In addition, <u>Umekita</u> also fails make up for the deficiencies of the combination of <u>Palay</u> and <u>Martin</u>.

Therefore, the combination of <u>Palay</u>, <u>Martin</u> and <u>Umekita</u> fails to establish a prima facie case of obviousness over the claimed invention.  Thus, claims 4, 8 and 12 patentably distinguish over <u>Palay</u> in view of <u>Martin</u> and further in view of <u>Umekita</u> at least due to their dependency upon claims 1 and 9 respectively, for the reasons mentioned above.  Therefore, it is respectfully submitted that the rejection is overcome.

## III.     CONCLUSION:

In view of the foregoing amendments and remarks, it is respectfully submitted that each of the claims patentably distinguishes over the prior art, and therefore, defines allowable subject

matter. A prompt and favorable reconsideration of the rejection along with an indication of allowability of all pending claims are therefore respectfully requested.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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